

CLAIMS

What is claimed is:

1. A scan line circuit that solves screen flicker, imperfect exposure junctions and inhomogeneous brightness in the TFT-LCD, which includes a plurality of TFTs disposed in an array, each array element having a TFT, and a plurality of perpendicular scan lines and data lines, each scan line and data line connecting to a gate and source of a TFT, respectively, with the drain of the TFT connecting to a liquid crystal capacitor and a storage capacitor, wherein the scan line circuit comprising:
 - 10 a gate voltage deformation device, which connects between the gate of the first TFT and a input terminal of the scan line to deform the gate input voltage waveform connected to the scan line circuit.
 2. The circuit of claim 1, wherein the gate voltage deformation device comprises a resistor.
 3. The circuit of claim 2, wherein the resistance of the resistor is in the range between
15 $10\Omega/\text{sq}$ and $100\Omega/\text{sq}$.
 4. The circuit of claim 1, wherein the gate voltage deformation device comprises an ITO thin film.
 5. The circuit of claim 1, wherein the gate voltage deformation device comprises a TFT with source/gate connection.
 - 20 6. The circuit of claim 1, wherein the scan line is a metal wire.
 7. A scan line circuit that solves screen flicker, imperfect exposure junctions and inhomogeneous brightness in the TFT-LCD which has a plurality of scan lines and a plurality of data lines disposed horizontally and vertically, respectively, each of the scan lines connecting the gates of a plurality of TFTs in a row and each of the data lines connecting the

sources of a plurality of TFTs in a column, thus forming an array using the plurality of TFTs, and the drain of each of the TFTs further connecting a liquid crystal capacitor and a storage capacitor, wherein the scan line circuit comprises a resistor connected between the scan line voltage input terminal and the gate of the first connected transistor.

5 8. The circuit of claim 7, wherein the resistor comprises an ITO thin film.

9. The circuit of claim 7, wherein the resistance of the resistor is in the range of about $10\Omega/\text{sq}$ and $100\Omega/\text{sq}$.

10 10. A scan line circuit that solves screen flicker, imperfect exposure junctions and inhomogeneous brightness in the TFT-LCD, which includes a plurality of TFTs disposed in an array, each array element having a TFT, and a plurality of perpendicular scan lines and data lines, each scan line and data line connecting to a gate and source of a TFT, respectively, with the drain of the TFT connecting to a liquid crystal capacitor and a storage capacitor, wherein the scan line circuit comprising:

gate voltage deformation means for deforming the gate input voltage waveform.

15 11. The circuit of claim 10, wherein the gate voltage deformation means comprises a resistor.

12. The circuit of claim 10, wherein the gate voltage deformation means comprises a TFT with source/gate connection.